

Work Order ID 125663

125663

Page 1

* Friday, October 17, 2014 3:23:29 PM

Item ID: D350-636-016

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Skidtube RH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/17/2014 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: *MLS*

Date: *14-10-17* Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N)

Date:

Stop *NR2*

Sequence ID/

Operation

Set Up/

Tool ID

Tool #

Plan

Accept

Reject

Reject

Insp.

Work Center ID

Description

Tool Name

Code

Qty

Qty

Number

Stamp

Draw Nbr

Revision Nbr

D4168-042

B

100

Document Control

100

DOCUMENT CONTROL

DC

Memo

Doc.Control -USB or Paperwork

record fwd angle: *89.2°*

Photocopy blue file and type labels per PPP D350-636-016 CHG 005

SCRAP

Scrap

Work Order ID 125663

Friday, October 17, 2014 3:23:29 PM

125663

Page 2

Item ID: D350-636-016

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N9000040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Skidtube RH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014 Start Qty: 1.00

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Cust Item ID:

Required Date: 10/17/2014 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center ID
110Operation
DescriptionSet Up/
Run Hours
0.00Tool ID Tool # Plan Accept Reject Reject Insp.
Code Qty Qty Number Stamp***110***

Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1- Pick D2600-3 Bent

2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D4168

3- Drill pilot holes for blade fitting bolt holes using DT8983. Start with 3/16", then open to 0.500" using center drill then ream holes using 0.500" reamer. PIN first side. Repeat process on second side.

ENSURE PROPER POSITIONING FWD BEND MUST BE FACING UP WHEN DRILLING FIRST SIDE

4- Locate DT8329 off of blade fitting bolt holes and drill pilot holes for blade fitting, section R-R and open to 0.500"

5- Drill fwd step holes using DT9616. Ensure proper positioning. All holes as per dwg D4168 Detail J

6- Drill most FWD wearplate hole using DT9678 locating of 66.54" hole

7- Open up holes of Detail J to 0.297" (total of 2 holes per side) +.201" (total of one hole per side) as per dwg D4168.

8- Weld D2744 Cap as per Dwg D4168 and QSI 004. Fill grooves in bend left from bending as per QSI 004

A/R Aluminum Rod batch: M129285

9- Grind welds flush as per Dwg D4168

DGC 14-10-23

7/8/14/10/23

DGC

Work Order ID 125663

Friday, October 17, 2014 3:23:29 PM

125663

Page 3

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Item Name: Skidtube RH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Acrasur Float Compatible

Start Date: 10/17/2014 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/17/2014 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

120

QC10- Inspect visual per QSI004- ground welds

0.00

120

QC

Memo

0.00

Quality Control

DAS
9
9-89

① 14.10.27

130

QC5- Inspect part completeness to step on W/O

0.00

130

QC

Memo

0.00

Quality Control

DAS
9
9-89

① 14.10.27

140

Chemical Conversion Coat per QSI005 4.1

0.00

140

HandFinish

Memo

0.00

Hand Finishing

① 14-10-27 J4/DBL

Work Order ID 125663

Friday, October 17, 2014 3:23:29 PM

125663

Page 4

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Revision ID:

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Start Date: 10/17/2014 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/17/2014 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center ID
150Operation
Description
QC7-Inspect Chemical Conversion CoatSet Up/
Run Hours
0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
StampDAS
18
9-80***150***

QC

Memo

0.00

Quality Control

1 6 BE14-10-28

Work Order ID 125663

Friday, October 17, 2014 3:23:29 PM

125663

Page 5

Item ID: D350-636-016

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Revision ID:

Stop ***NS2***

Item Name: Skidtube RH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/17/2014 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center ID
160Operation
DescriptionSet Up/
Run Hours
0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp***160***

Skidtubes

Skidtubes

Skidtubes

Memo

0.00

~~1~~ Open up holes using hole saw of Detail L and ground handling to 0.625" (total of 8 holes per side) as per dwg D4168.

~~2~~ Open up holes using hole saw of Detail K to 0.750" (total of 4 holes per side) as per dwg D4168.

~~3~~ Open float hole to 0.500" using uni-bit (4 per side) and Run on wearplate holes to .375" 4 per side

~~4~~ Chamfer holes of Detail K,L, ground handling and float holes per dwg D4168 (welding instructions on sheet 9)

~~5~~ Deburr and blow out all chips from inside of tube

~~6~~ Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI 015, let cure for 12hrs.

A/R Sikaflex-291

batch: 130227exp. date: 15-2-5

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D4168 & QSI004 (welding instructions on sheet 8)

A/R Aluminum Rod

batch: M129285

9- At section AP-AP drill out x-bolt spacer to 0.404"

10-Grind welds flush as per Dwg D4168

14-10-28

BE 14-10-29

ID

PTD

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design ☐	15/1/8	1	1	New tool removed too much material around one wearplate hole. Thickness 0.030 below new mat'l tolerance. <i>dooling</i>		SCRAP. Too noticeable, customer likely to see as dent. <i>UP 15/1/8</i>	 15-1-8	 15-1-8	PD 15-01-13
Doc/Data ☐									
Equip/Tooling ☒									
Handling/Pre ☐									
Material ☐									
Operator ☐									
Offset/Setup ☐									
Process ☐									
Supplier ☐									
Training ☐									
Transport ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence
		☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge
		☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other

Work Order ID 125663

Friday, October 17, 2014 3:23:29 PM

125663

Page 6

Item ID: D350-636-016

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Skidtube RH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Compatible

Stop ***NS2***

Start Date: 10/17/2014 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/17/2014 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp11-Spot face ground handling holes section (total of 4 places per side) as per
dwg D416812- C'bore section CH-CH. ADJUST TOOLING AS REQUIRED.
VERF BY: _____13- Deburr holes, ensure tube is free of all scratches before sending to
paint.***** FOR DELUXE SKIDTUBE IF APPLICABLE DRILL TOW RING
HOLE IN TUBE *****
*****REF TO W/O BATCH: _____*****

170

QC10- Inspect visual per QSI004- ground welds 0.00

170

QC

Memo

0.00

Quality Control

Work Order ID 125663

Friday, October 17, 2014 3:23:29 PM

125663

Page 7

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N900040100Setup Start ***NS1***

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Item Name: Skidtube RH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Compatible

Stop ***NS2***

Start Date: 10/17/2014 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/17/2014 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center ID
180Operation
Description
QC5- Inspect part completeness to step on W/OSet Up/
Run Hours
0.00Tool ID Tool # Plan Accept Reject Reject Insp.
Code Qty Qty Number Stamp***180***QC
Quality ControlMemo
VERIFY C'BOARD IS GOOD

0.00

190

Pressure Wash per QSI005 4.3

0.00

190HandFinish
Hand FinishingMemo
Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

0.00

200

0.00

200SprayPaint
Spray PaintingMemo
1- PRIME AS PER DWG AND QSI 005 4.2
PRIMER PRC DESOTO 515X349 BATCH: _____
2- PAINT WHITE AS PER DWG AND QSI 005 4.2
PAINT BATCH: _____

0.00

Work Order ID 125663

Friday, October 17, 2014 3:23:29 PM

125663

Page 8

Item ID: D350-636-016**Accept*****N900040100*****Setup Start *NS1*****Revision ID:****Stop *NS2*****Item Name:** Skidtube RH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Compatible**Start Date:** 10/17/2014 **Start Qty:** 1.00***1*****Cust Item ID:****Required Date:** 10/17/2014 **Req'd Qty:** 1.00***1*****Customer:****Reference:****Approvals:** **Process Plan:****Date:****Tooling:****Date:****Run Start *NR1*****QC:****Date:****SPC (Y/N):****Date:****Stop *NR2*****Sequence ID/
Work Center ID**
210**Operation****Description**

QC14- Inspect Spray Paint

**Set Up/
Run Hours**

0.00

Tool ID**Tool #****Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp*****210***

QC

Quality Control

Memo

0.00

Inspect for foreign object per QSI 024

230

230

HandFinish

Hand Finishing

HandFinishing**Memo**

0.00

1- Install inserts as per Dwg D4168

2-Inspect for Foreign Objects

3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D4168

SIKA FLEX 241

BATCH: _____

EXP DATE: _____

4-assemble o'ring to plug as per dwg D3492 and apply o'ring lube

A/R 55-o'ring lube batch: _____

5-Coat all exposed fasteners with "LPS Procyon" batch: _____

Work Order ID 125663

Friday, October 17, 2014 3:23:29 PM

125663

Page 9

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Item Name: Skidtube RH with Run-on Landing Wearplates, DART (Apical) Cylindrical/Aerazur Float Compatible

Stop ***NS2***

Start Date: 10/17/2014 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/17/2014 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240	QC5- Inspect part completeness to step on W/O	0.00							
240									
QC	Memo	0.00							
Quality Control									
250	Pick Kit	0.00							
250									
Packaging	Memo	0.00							
Packaging	If making a D350-636-216 pick kit will only requires: 1 X AN3C37A 1 X AN3C34A 1 X AN3C42A 2 X D3493-1								
260	QC4- 100% Inspect kits for completeness	0.00							
260									
QC	Memo	0.00							
Quality Control	*****ensure antiseize is on AN8C21A bolts*****								

Work Order ID 125663

Friday, October 17, 2014 3:23:29 PM

125663

Page 10

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Stop ***NS2***

Start Date: 10/17/2014 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/17/2014 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270	Packaging	0.00							
270									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPPD350-636-016								
	Location: _____								
	PPP rev: _____								
280	QC21- Final Inspection - Work Order Release	0.00							
280									
QC	Memo	0.00							
Quality Control									

OSCAR
15-1-13

Picklist Print

Friday, October 17, 2014 3:23:34 PM

Page 1

Work Order ID: 125663

125663

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH with Run-on Landing Wearplates, DART (Apical)
Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014

Required Date: 10/17/2014

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP rev:A 10.09.28 new issue DD verf:EC IPP Rev:B
11.04.14 ecn11-553 DD verf:EC IPP Rev:C 11.10.18 as
per NCR 11-906 DD verf:EC IPP REV:D 13.08.28 PER ECN13-
594 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3490-1		Manufactured	No			160	Each	116.0000	4	4			
D3490-1									**				
Cross Bolt Spacer													

Location	Loc Qty	Loc Code
LG	115	
122457	35	
124025	80	
LG001	1	
112737	1	

D3490-3	Manufactured	No	160	Each	89.0000	4	4
D3490-3						**	
Cross Bolt Spacer							

Location	Loc Qty	Loc Code
LG	89	
122751	8	
124024	81	

AN3C34A	Purchased	No	230	Each	17.0000	1	1
AN3C34A						**	
BOLT							

Location	Loc Qty	Loc Code
ST352	17	
m127044	17	

Picklist Print

Friday, October 17, 2014 3:23:34 PM

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Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014

Required Date: 10/17/2014

AN3C36A

Purchased

No

230

Each

Start Qty: 1.00
214.0000 4 4

Required Qty: 1.00

AN3C36A

Bolt

**

Location

Loc Qty

Loc Code

FG

25

101261

4

122204

11

124827

10

ST347

189

m127769

1

m128398

13

m129907

175

AN3C37A

Purchased

No

230

Each

423.0000 1 1

AN3C37A

BOLT

**

Location

Loc Qty

Loc Code

ST347

216

M127823

7

M129650

200

M129687

9

ST353

7

M127823

7

ST514

200

M128773

200

Picklist Print

Friday, October 17, 2014 3:23:34 PM

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125663

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D350-636-016

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Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014

Required Date: 10/17/2014

AN3C42A

Purchased

No

230

Each

50.0000

1

1

Start Qty: 1.00

Required Qty: 1.00

AN3C42A

Bolt

**

Location

Loc Qty

Loc Code

FG

5

121103

5

ST347

30

m130485

30

ST353

15

m127300

1

m128830

8

m130460

6

D3488-042

Manufactured

No

230

Each

14.0000

1

1

D3488-042

Blade Fitting RH

**

Location

Loc Qty

Loc Code

FP001

13

115599

6

120135

6

98887

1

FP002

1

112237

1

Picklist Print

Friday, October 17, 2014 3:23:34 PM

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Parent Item Name: Skidtube RH with Run-on Landing Wearplates, DART (Apical)
Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014

Required Date: 10/17/2014

D3492-1	Manufactured	No	230	Each	177.0000	8	8	Start Qty: 1.00	Required Qty: 1.00
---------	--------------	----	-----	------	----------	---	---	-----------------	--------------------

D3492-1

Plug

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	177	
111578	2	
114879	7	
119646	2	
120519	2	
122460	44	
124026	120	

D3492-3	Manufactured	No	230	Each	214.0000	8	8		
---------	--------------	----	-----	------	----------	---	---	--	--

D3492-3

Plug

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	214	
104853	24	
107331	1	
112739	1	
115807	6	
118977	2	
123464	100	
124027	80	

Picklist Print

Friday, October 17, 2014 3:23:34 PM

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Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014

Required Date: 10/17/2014

D3873-1 Manufactured No 230 Each 159.0000 7 7 Start Qty: 1.00 Required Qty: 1.00

D3873-1

Bushing

**

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST063	159	
104858	5	
105611	8	
109110	1	
121363	17	
122917	68	
124192	60	

D4154-041 Manufactured No 230 Each 4.0000 1 1

D4154-041

Wearplate Assembly

**

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	4	
106716	1	
113649	1	
121481	2	

D4170-1 Manufactured No 230 Each 174.0000 4 4

D4170-1

Bushing

**

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	41	
123940	41	
LG001	133	
107896	89	
119639	44	

BE14-1029

Picklist Print

Friday, October 17, 2014 3:23:34 PM

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125663

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Parent Item Name: Skidtube RH with Run-on Landing Wearplates. DART (Apical)
Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014

Required Date: 10/17/2014

D4171-1	Manufactured	No	230	Each	11.0000	1	1
---------	--------------	----	-----	------	---------	---	---

Start Qty: 1.00

Required Qty: 1.00

D4171-1

Bushing

**

Location

Loc Qty

Loc Code

ST096

11

109144

1

125038

10

MS21043-3	Purchased	No	230	Each	142.0000	5	5
-----------	-----------	----	-----	------	----------	---	---

MS21043-3

Nut

**

Location

Loc Qty

Loc Code

FG

80

103691

80

GA

20

m130186

20

ST306

42

m128398

16

m129472

9

m129521

17

NAS1149C0363R	Purchased	No	230	Each	484.0000	9	9
---------------	-----------	----	-----	------	----------	---	---

NAS1149C0363R

Washer

**

Location

Loc Qty

Loc Code

ST278

484

114742

455

122441

7

m128591

22

Picklist Print

Friday, October 17, 2014 3:23:34 PM

Work Order ID: 125663

125663

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH with Run-on Landing Wearplates, DART (Apical)
Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014

Required Date: 10/17/2014

NAS1515H3L

Purchased

No

230

Each

Start Qty: 1.00
265.0000 4 4

Required Qty: 1.00

***NAS1515H3I ***

Washer

**

Location

Loc Qty

Loc Code

FG

40

102472

40

ST273

225

m127831

136

m128976

89

NAS1611-010

Purchased

No

230

Each

319.0000 8 8

NAS1611-010

O-RING

**

Location

Loc Qty

Loc Code

FP001

319

m126988

3

m127813

4

m128375

10

m129198

44

m129405

82

m129523

176

NAS1611-013

Purchased

No

230

Each

392.0000 8 8

NAS1611-013

O-RING

**

Location

Loc Qty

Loc Code

FP001

392

130581

200

m128375

72

m129430

20

m130358

100

Picklist Print

Page 8

Friday, October 17, 2014 3:23:34 PM

Work Order ID: 125663

125663

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH with Run-on Landing Wearplates, DART (Apical)
Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014

Required Date: 10/17/2014

NAS1149D0863J	Purchased	No	250	Each	781.0000	2	2
---------------	-----------	----	-----	------	----------	---	---

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0863.I

**

Washer

Location	Loc Qty	Loc Code
ST276	581	
118078	2	
125268	579	
ST2776	200	
125635	200	

D2744

Manufactured No

110	Each	37.0000	1	1
-----	------	---------	---	---

D2744

**

Cap

Location	Loc Qty	Loc Code
LG001	37	
113128	36	
115440	1	

D2600-3-BENT-RH

Manufactured No

110	Each	0.0000	1	1
-----	------	--------	---	---

D2600-3-BENT-RH

**

Extrusion Bent RH

D2743

Manufactured No

160	Each	234.0000	8	8
-----	------	----------	---	---

D2743

**

Crossbolt Spacer

Location	Loc Qty	Loc Code
LG	170	
124423	170	
LG001	64	
109799	1	
120481	63	

BE 4-10-23

123607 ① DCL 14-10-23

BE 4-10-29

Friday, October 17, 2014 3:23:34 PM

Shop Packet Print

Page 8

Picklist Print

Friday, October 17, 2014 3:23:34 PM

Work Order ID: 125663

125663

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH with Run-on Landing Wearplates, DART (Apical)
Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014

Required Date: 10/17/2014

D2739

Manufactured No

160 Each

Start Qty: 1.00
9.0000 1 1

Required Qty: 1.00

D2739

350 I Beam

**

Location

Loc Qty

Loc Code

LG

6

124522

6

LG002

3

117245

2

117803

1

ALS4-1032-225

AELS8-1032-225 Purchased

No

230 Each

2.077.000 4 4

AI S4-1032-225

Rivnut

**

Location

Loc Qty

Loc Code

FG

30

M127028

30

FP001

113

M128649

113

ST267

1934

M127028

10

M127092

26

M128179

168

M130565

730

M130579

1000

①

14-10-28

Picklist Print

Friday, October 17, 2014 3:23:34 PM

Work Order ID: 125663

125663

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH with Run-on Landing Wearplates, DART (Apical)
Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014

Required Date: 10/17/2014

AN8C35A	Purchased	No	230	Each	65.0000	1	1	Start Qty: 1.00	Required Qty: 1.00
---------	-----------	----	-----	------	---------	---	---	-----------------	--------------------

AN8C35A

Bolt

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	4	
121275	4	
FP001	61	
m126293	29	
m127823	1	
m130114	31	

AN6C44A	Purchased	No	230	Each	21.0000	4	4
---------	-----------	----	-----	------	---------	---	---

AN6C44A

Bolt

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	2	
103964	2	
ST333	19	
m128319	2	
m128700	1	
m129199	16	

MS21083C8	Purchased	No	230	Each	94.0000	1	1
-----------	-----------	----	-----	------	---------	---	---

MS21083C8

Nut

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST302	94	
m127255	5	
m128119	2	
m128798	48	
m130358	39	

Picklist Print

Friday, October 17, 2014 3:23:34 PM

Work Order ID: 125663

125663

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH with Run-on Landing Wearplates, DART (Apical)
Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014

Required Date: 10/17/2014

D3631-1

Manufactured No

230 Each

Start Qty: 1.00
178.0000 8 8

Required Qty: 1.00

D3631-1

Washer

Location

Loc Qty

Loc Code

FP001

178

110258

16

119553

10

123452

52

124353

100

NAS1149C0332R

Purchased No

230 Each

8.749.000 4 4

NAS1149C0332R

WASHER

Location

Loc Qty

Loc Code

CA

83

m129682

83

ST278

8666

122063

41

125654

425

m126319

51

m127306

2065

m127831

26

m128591

75

m129499

191

m130325

4792

m130466

1000

Picklist Print

Friday, October 17, 2014 3:23:34 PM

Work Order ID: 125663

125663

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH with Run-on Landing Wearplates, DART (Apical)
Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014

Required Date: 10/17/2014

D2745 Manufactured No 230 Each 209.0000 8 8 **Start Qty: 1.00 Required Qty: 1.00**

D2745

Bushing

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST010	209	
107336	4	
113176	2	
117099	7	
119572	51	
122643	25	
124375	120	

NAS1149C0832R Purchased No 230 Each 252.0000 1 1

NAS1149C0832R

Washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST277	252	
m114915	102	
m125807	150	

AN3C6A Purchased No 230 Each 981.0000 4 4

AN3C6A

Bolt

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	10	
122416	10	
ST513	971	
m125709	15	
m128769	956	

Picklist Print

Page 13

Friday, October 17, 2014 3:23:34 PM

Work Order ID: 125663

125663

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH with Run-on Landing Wearplates. DART (Apical)
Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014

Required Date: 10/17/2014

MS21043-6	Purchased	No	230	Each	124.0000	4	4
-----------	-----------	----	-----	------	----------	---	---

Start Qty: 1.00

Required Qty: 1.00

MS21043-6

NUT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	20	
103693	20	
ST306	104	
m127255	6	
m127813	10	
m130325	88	

D3493-1

Manufactured No

250	Each	125.0000	2	2
-----	------	----------	---	---

D3493-1

Washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	10	
97201	10	
ST046	115	
109105	115	

MS21083C8

Purchased No

250	Each	94.0000	2	2
-----	------	---------	---	---

MS21083C8

Nut

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST302	94	
m127255	5	
m128119	2	
m128798	48	
m130358	39	

Friday, October 17, 2014 3:23:34 PM

Shop Packet Print

Page 13

Picklist Print

Friday, October 17, 2014 3:23:34 PM

Work Order ID: 125663

125663

Parent Item: D350-636-016

D350-636-016

Parent Item Name: Skidtube RH with Run-on Landing Wearplates, DART (Apical)
Cylindrical/Aerazur Float Compatible

Start Date: 10/17/2014

Required Date: 10/17/2014

AN8C21A

Purchased

No

250

Each

48.0000

2

2

Start Qty: 1.00

Required Qty: 1.00

AN8C21A

Bolt

**

Location

Loc Qty

Loc Code

FG

2

123966

2

ST332

46

m127061

2

m127823

3

m129888

41

D2741

Manufactured

No

250

Each

39.0000

1

1

D2741

Blade

**

Location

Loc Qty

Loc Code

FG

9

100664

5

113640

1

115522

3

ST538

30

118387

30

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D4168-041	350 SKIDTUBE ASSEMBLY, LH
	X			D4168-042	350 SKIDTUBE ASSEMBLY, RH
		X		D4168-043	350 SKIDTUBE ASSEMBLY, LH
			X	D4168-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
8	8	8	8	D3631-1	WASHER
7	7	7	7	D3873-1	BUSHING
1	1	1	1	D4154-041	WEARPLATE ASSEMBLY
1				D4168-1	SKIDTUBE WELDMENT, LH
	1			D4168-2	SKIDTUBE WELDMENT, RH
		1		D4168-3	SKIDTUBE WELDMENT, LH
			1	D4168-4	SKIDTUBE WELDMENT, RH
4	4	4	4	D4170-1	SPACER
1	1	1	1	D4171-1	BUSHING
4	4	4	4	ALS4-1032-225	INSERT
4	4	4	4	AN3C6A	BOLT
1	1	1	1	AN3C34A	BOLT
4	4	4	4	AN3C36A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
9	9	9	9	AN960C10	WASHER (OR NAS1149CO363R)
4	4	4	4	AN960C10L	WASHER (OR NAS1149CO332R)
1	1	1	1	AN960C816L	WASHER (OR NAS1149CO832R)
5	5	5	5	MS21043-3	NUT
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- MATERIAL: MAKE D4168-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
STANDARD: PRIME (REF. 4.2.1.3.3) AND PAINT WHITE PER DART QSI 005 4.2

OPTIONAL: POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D4168-041/-042/-043/-044 = 32.3 LBS
- WELD PER DART QSI 004
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
 MINIMUM YIELD TENSILE STRENGTH = 35 KSI
 MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
FINISH WITH MEK DEGREASER
- SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

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WORK ORDER

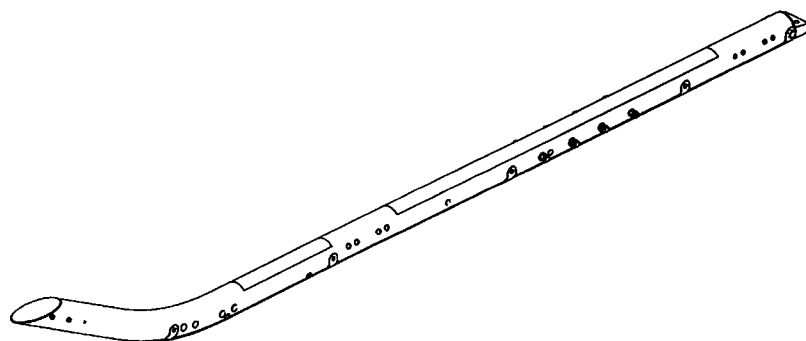
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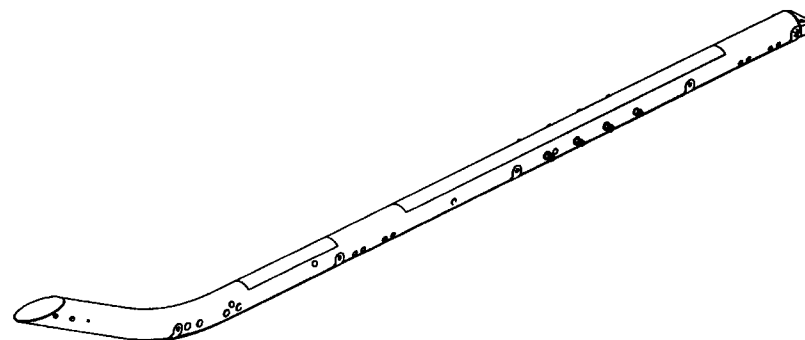
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2013-08-13
AMP

B	ADD VIEW TO CONTROL FWD BEND ORIENTATION (ZN D-1-4/-5/-6/-7); UPDATED FINISH OPTIONS. REASON: PAR13-276 AND NCR13-2757	MB	13.07.11
A	NEW ISSUE	SC	10.08.09
REV.	DESCRIPTION	BY	DATE
DESIGN	SC		
DRAWN	SC		
CHECKED	SC		
MFG. APPR.	SC		
APPROVED	SC		
DE APPR.	SC		
DATE	13.07.11		

DART AEROSPACE USA, INC. KENT, WA	
DRAWING NO. D4168	REV. B SHEET 1 OF 11
TITLE 350 SKIDTUBE ASSEMBLY	SCALE NTS
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D4168-041 350 SKIDTUBE ASSEMBLY, LH



D4168-042 350 SKIDTUBE ASSEMBLY, RH

RELEASE
2013-08-13
AW

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CHECKED	<i>[Signature]</i>	
MFG. APPR.	<i>[Signature]</i>	
APPROVED	<i>[Signature]</i>	
DE APPR.		REV. B
DATE	13.07.11	SHEET 2 OF 11
		SCALE
		NTS

8 7 6 5 4 3 2 1

D

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C

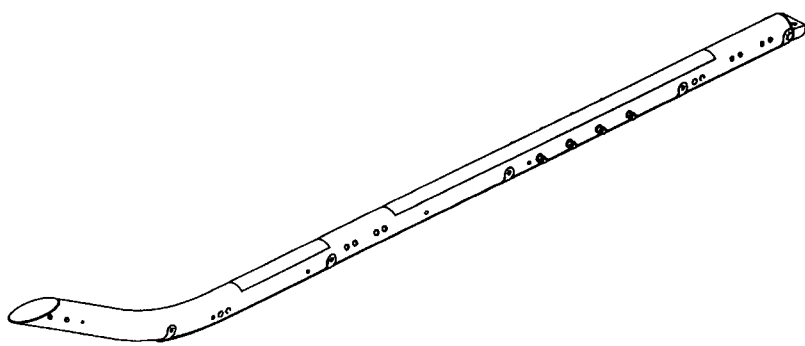
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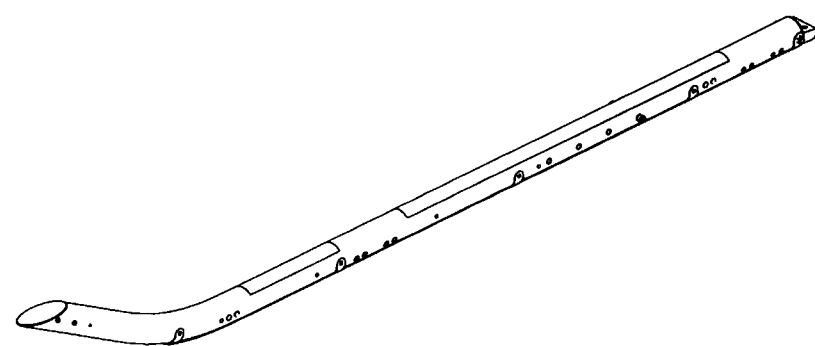
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A



D4168-043 350 SKIDTUBE ASSEMBLY, LH



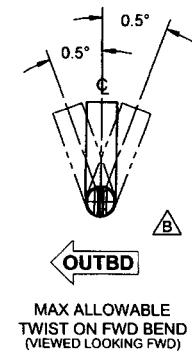
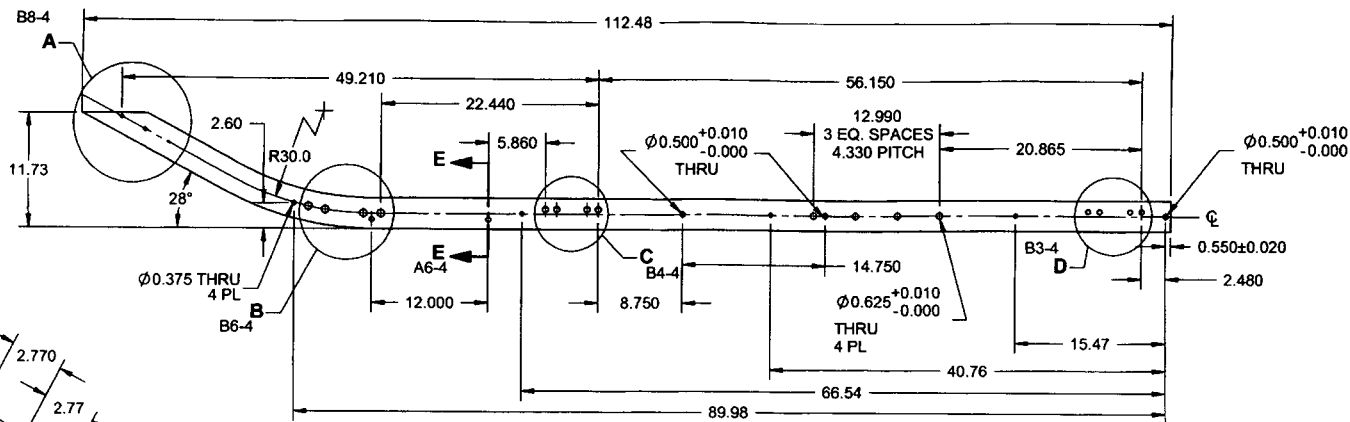
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2013-08-13
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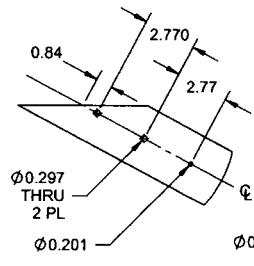
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CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D4168	SHEET 3 OF 11
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	350 SKIDTUBE ASSEMBLY	NTS
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8 7 6 5 4 3 2 1

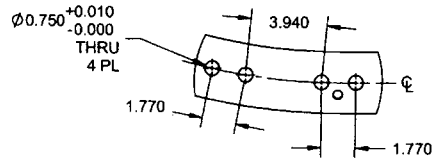


D4168-1 LH SKIDTUBE



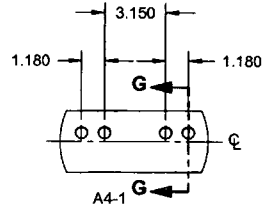
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D7-4



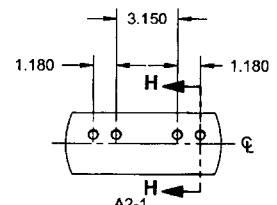
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D7-4



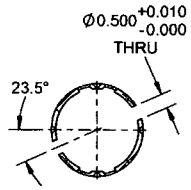
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D5-



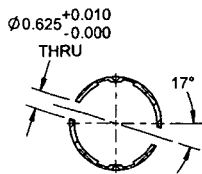
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D3-



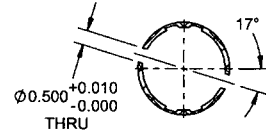
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D6-4



SECTION G-G
SCALE 3X, 4 PL

B4-4



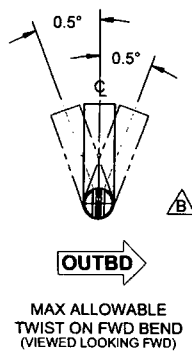
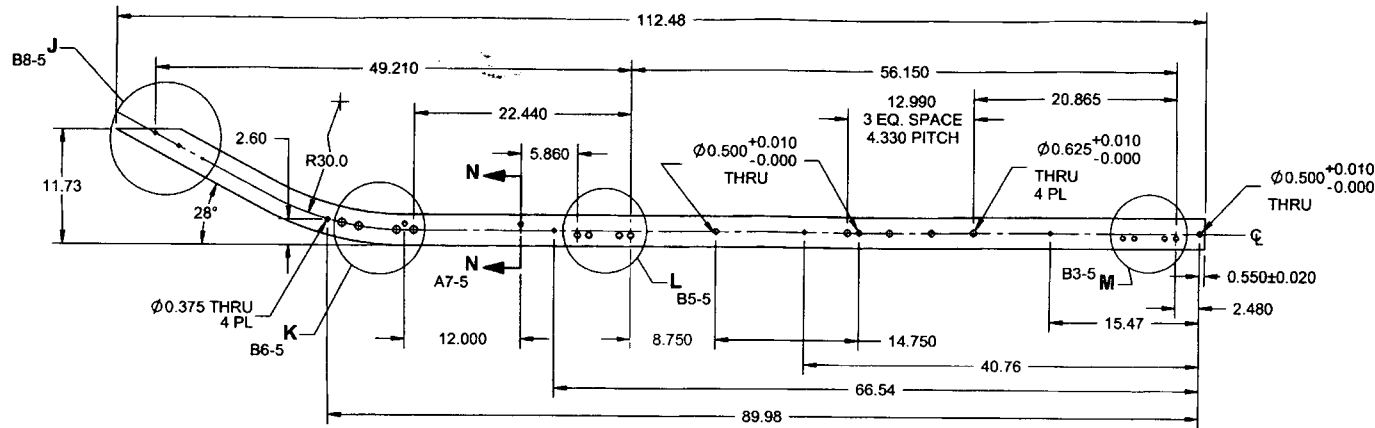
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SCALE 3X, 4 PL

B2-4

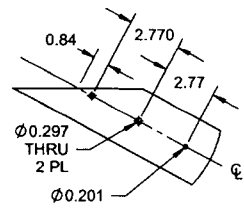
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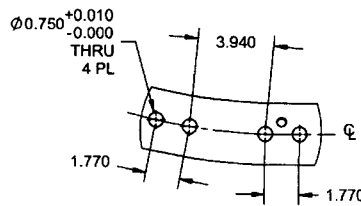
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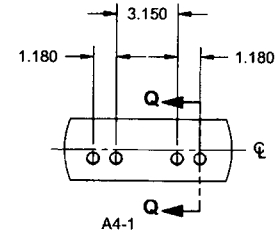
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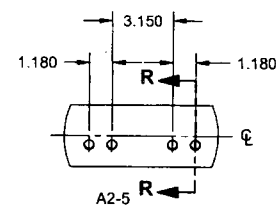
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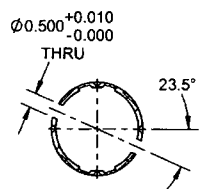
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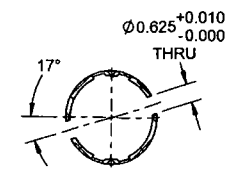
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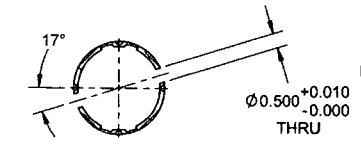
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SECTION N-N
SCALE 3X, 2 PL



SECTION Q-Q
SCALE 3X, 4 PL

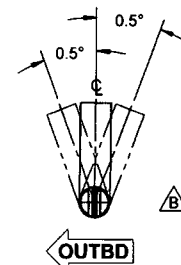
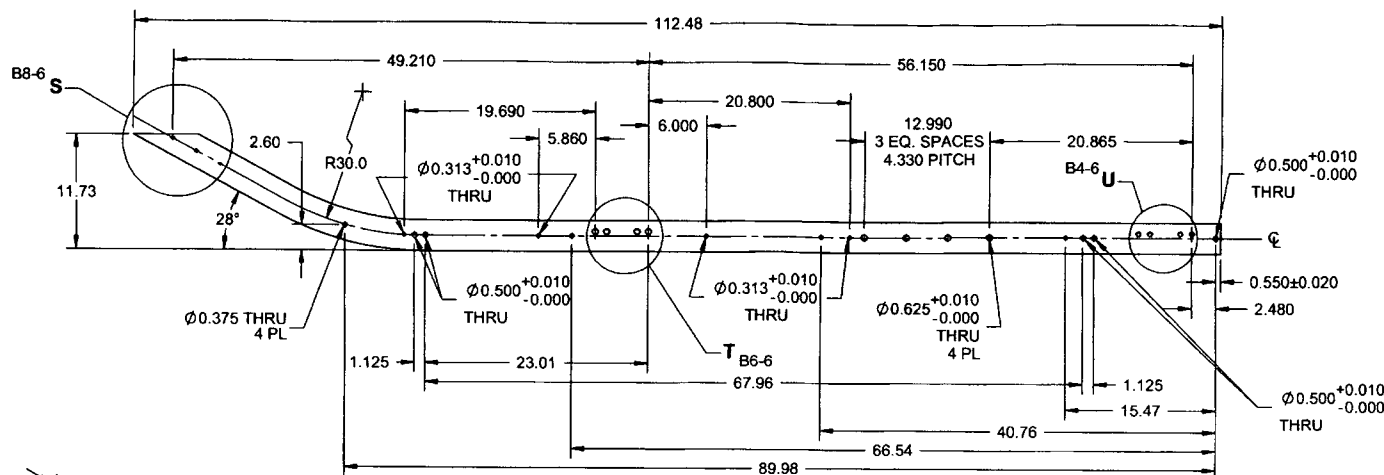


SECTION R-R
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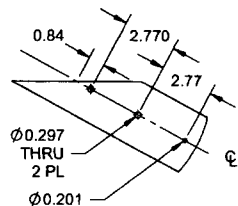
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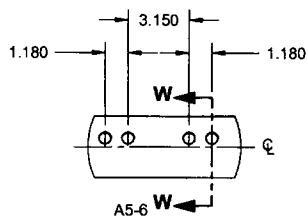
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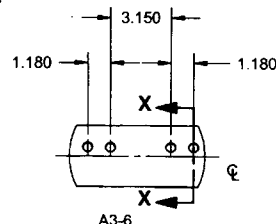
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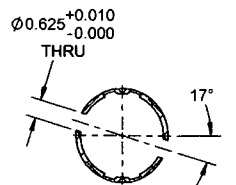
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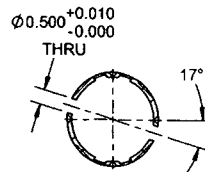
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DETAIL U
SCALE 2X



SECTION W-W
SCALE 3X, 4 PL



SECTION X-X
SCALE 3X, 4 PL

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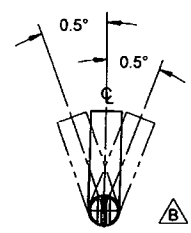
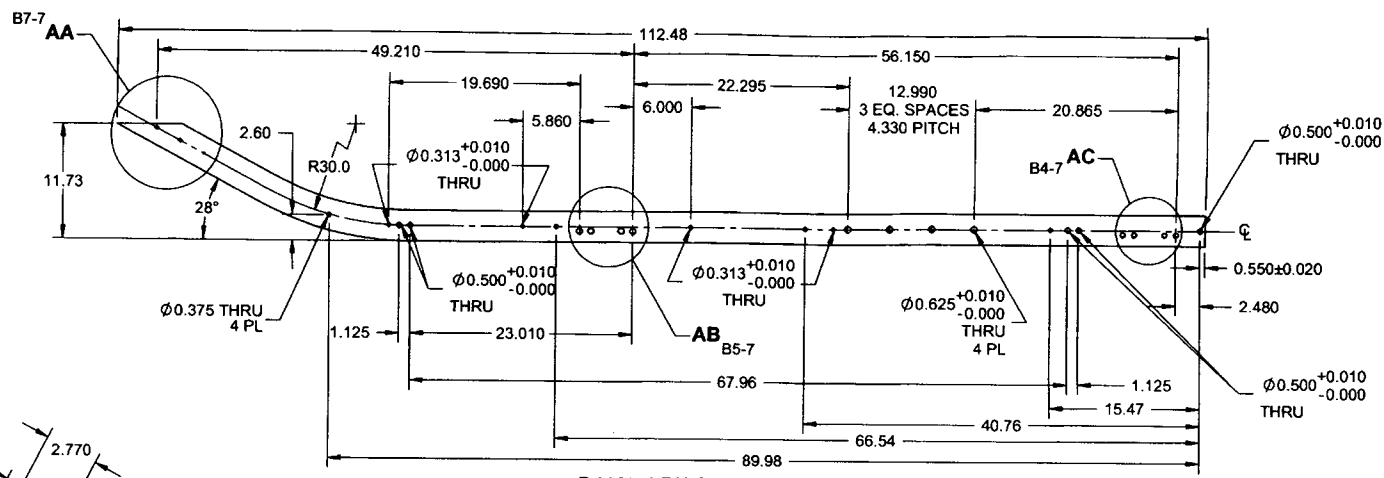
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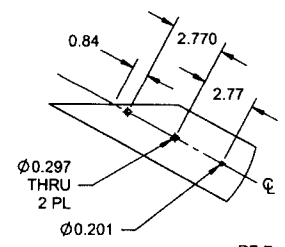
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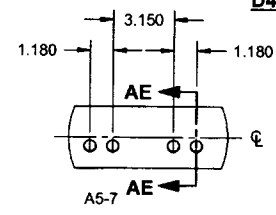
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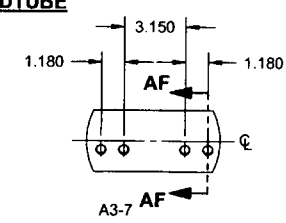
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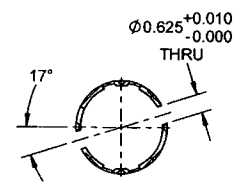
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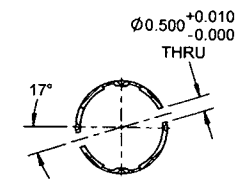
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DETAIL AC
SCALE 2X



SECTION AE-AE
SCALE 3X, 4 PL

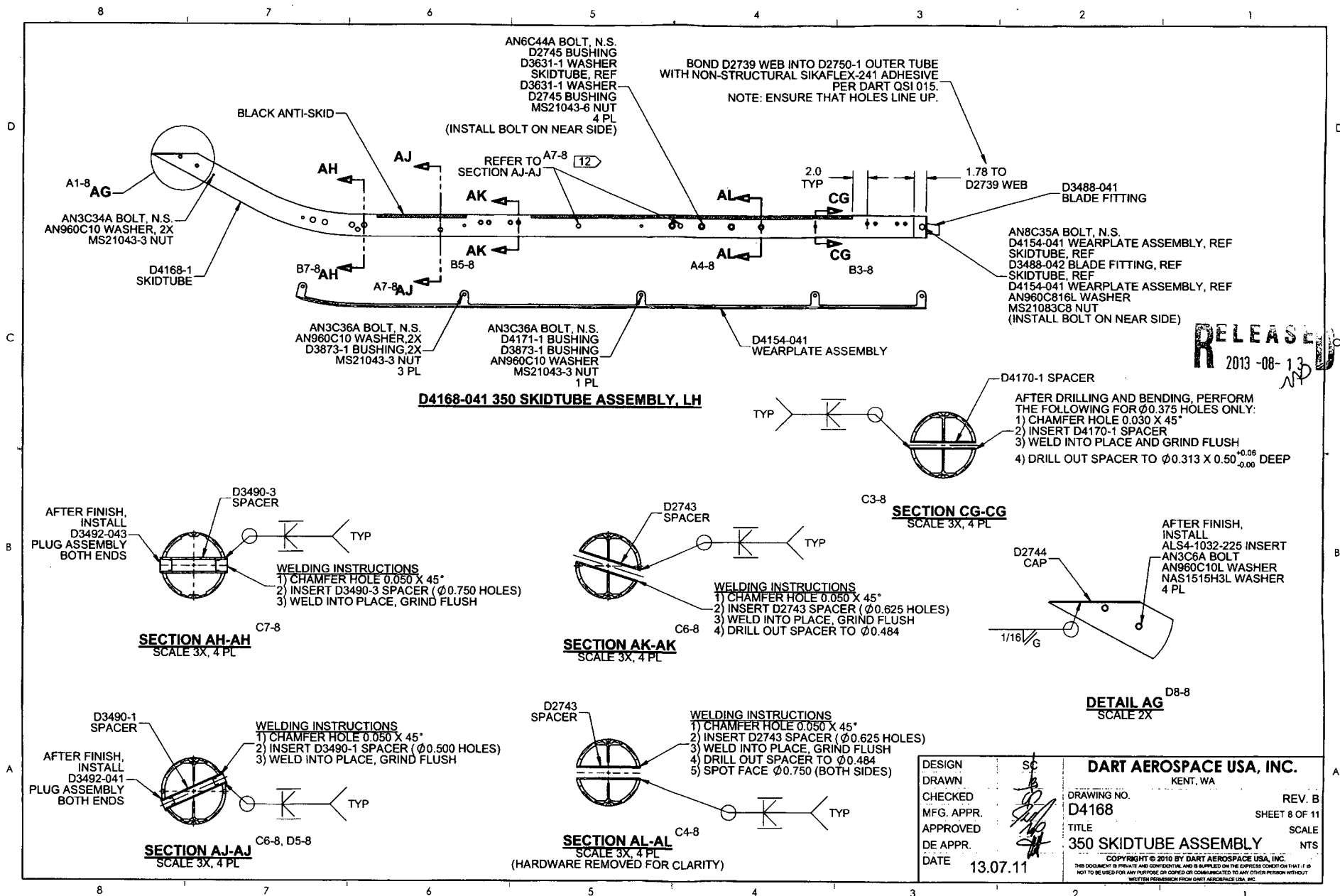


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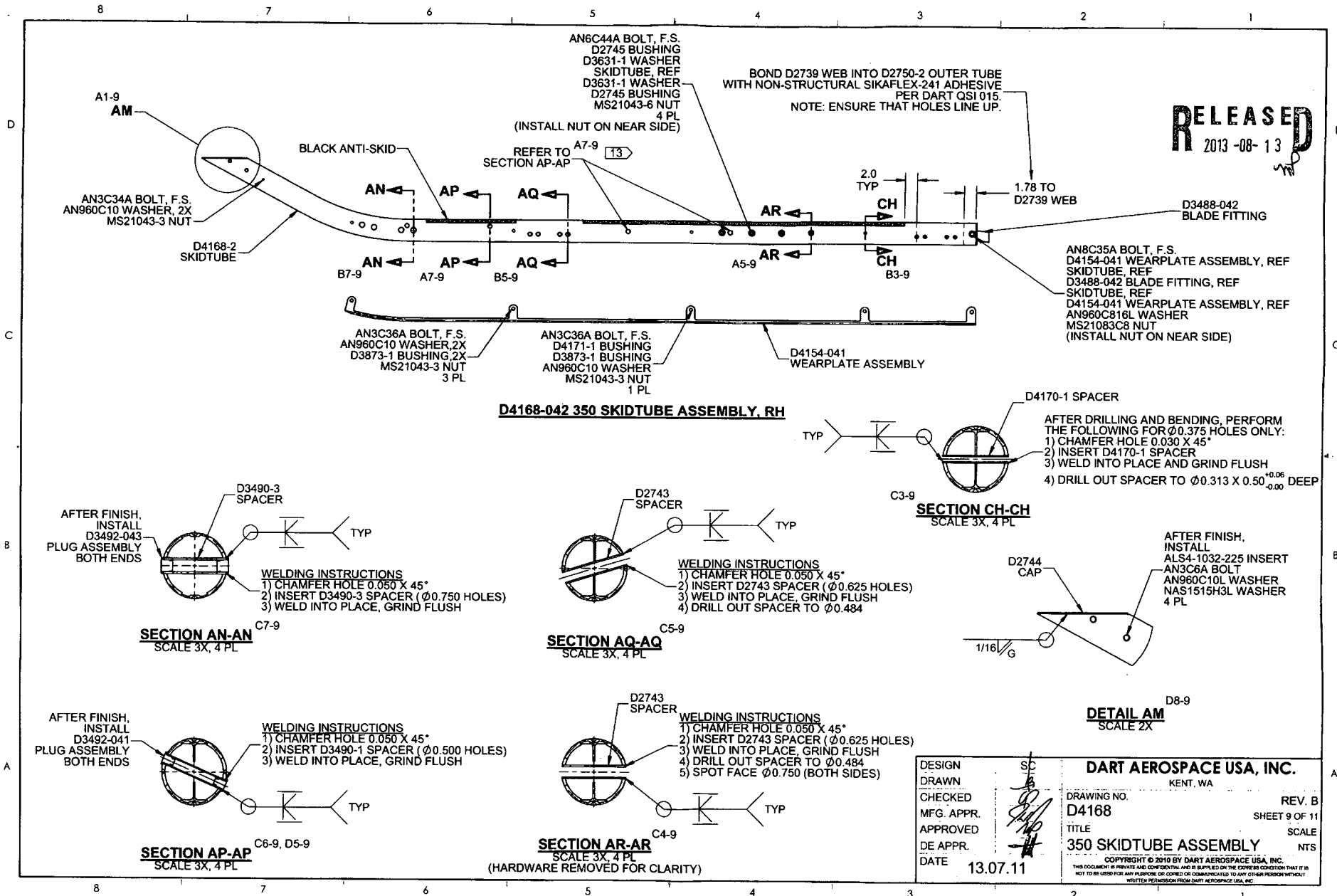
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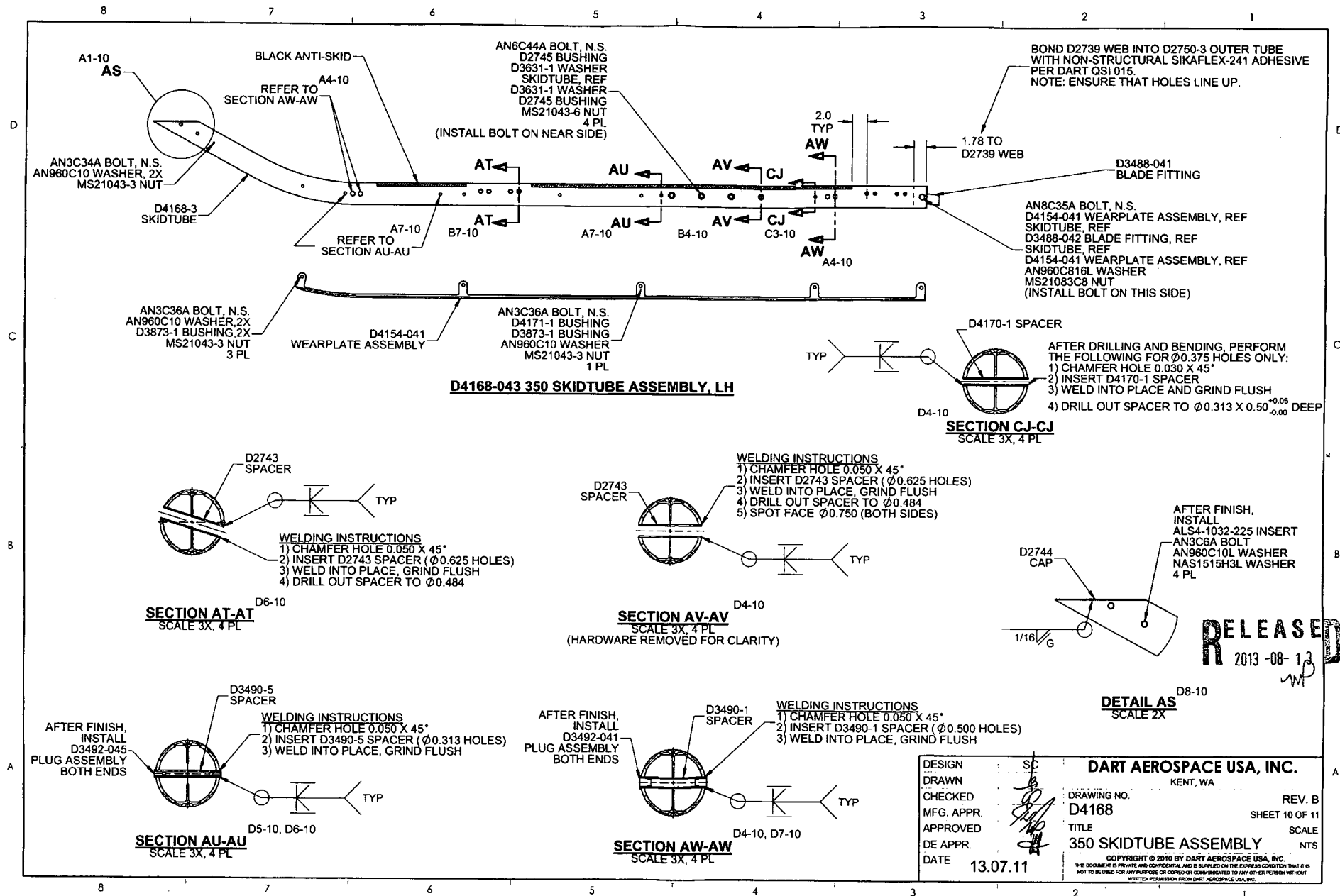
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